

# Notice of Allowability

Application No.

10/005,623

Examiner

Gims S Philippe

Applicant(s)

XIE ET AL.

Art Unit

2613

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed on December 5<sup>th</sup> 2001.
2. ☒ The allowed claim(s) is/are 1-19.
3. ☒ The drawings filed on 05 December 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

***Allowable Subject Matter***

1. After a further search and a thorough examination of the present application and in light of the prior art made of record, claims 1-19 are found to be in condition for allowance.

***Reasons for Allowance***

2. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

The claims are allowable over the prior art of record since the cited reference taken individually or in combination fails to particularly disclose a method for analyzing a continuous compressed video according to a plurality of states, comprising extracting a set of domain specific features from fixed-length sliding windows of frames of the continuous compressed video, determining a set of maximum likelihoods for each set of domain specific features using a plurality of sets of trained hidden Markov models, and applying dynamic programming to each set of maximum likelihoods to determine a specific state for each fixed-length sliding window of frames of the continuous compressed video.

It is noted that the closest prior art of record (Wilcox et al. US Patent no. 6072542) teaches a similar method for analyzing a continuous compressed video, however, Wilcox fails to particularly teach or suggest “*determining a set of maximum likelihoods for each set of domain specific features using a plurality of sets of trained hidden*

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*Markov models, applying dynamic programming to each set of maximum likelihoods to determine a specific state for each fixed-length sliding window of frames of the continuous compressed video” as specified in the claims.*

### **Conclusion**

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pavlovic et al. (US Patent no. 6683968) teaches method for visual tracking using switching linear dynamic system models.

Li (US Patent Application Publication no. US2003/0081937 A1) teaches summarization of video content.

Ahsun Murad and Thomas Fuja (IEEE Journal 1998) teach Exploiting the Residual Redundancy in Motion Estimation Vectors to Improve the Quality of Compressed Video Transmitted over Noisy Channels.

John McEachen and Abdullah Cay (IEEE Journal 2001) teach Masking Compressed Video Connection Utilization in ATM Networks.

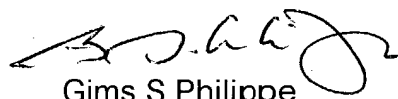
Any comments considered necessary by applicant must be submitted no later than the payment of issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled “Comments on Statement of Reasons for Allowance”.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S Philippe whose telephone number is (703) 305-1107. The examiner can normally be reached on M-F (9:30-7:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S Kelley can be reached on (703) 305-4780. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gims S Philippe  
Primary Examiner  
Art Unit 2613

GSP

October 25, 2004